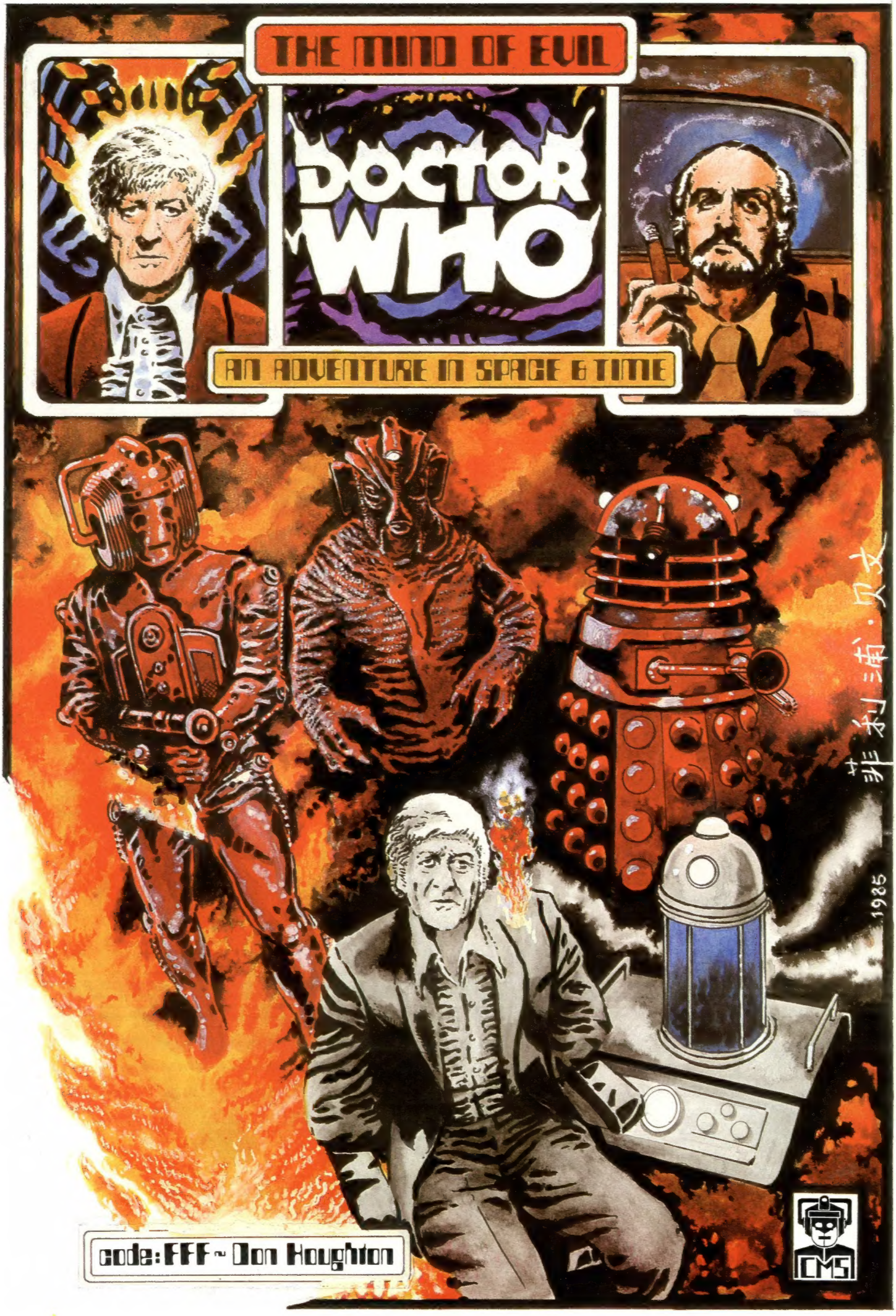
THE MIND OF EVIL
DOCTOR WHO
AN ADVENTURE IN SPACE & TIME
code: FFF ~ Don Houghton
1985

The Doctor and Jo are visiting Stangmoor Prison to view a demonstration of a revolutionary new device called the Keller Machine, which is designed to extract the 'negative' or evil emotions from criminals' brains. The Doctor becomes suspicious when a prisoner, Barnham, collapses while undergoing the process and his worries intensify when a man dies after seemingly being attacked by rats.

The Brigadier has his own problems while in charge of security arrangements for the first World Peace Conference. First valuable documents are reported missing by the Chinese security officer, Captain Chin Lee, then the Chinese delegate is found dead.

When a second person dies at the Prison, the Doctor concludes that the Keller Machine is responsible. As he attempts to isolate it, the Machine conjures up a nightmarish vision of a world in flames. However, these images disappear when Jo arrives. Before the Doctor can investigate further he is persuaded by Captain Yates to go back to UNIT and assist the Brigadier with his problems at the Conference. Yates himself is meanwhile entrusted with the task of disposing of a banned warhead, the Thunderbolt missile - unaware that the Master is planning to steal it. The renegade Time Lord also has Chin Lee under his control and he orders her to kill the American delegate. The Doctor and the Brigadier arrive at the American suite in time to prevent this, and they learn that Keller is in fact the Master. Now knowing that his arch-enemy is in control of the Machine, the Doctor heads back to the Prison.

Henry Mailer is the next prisoner due to undergo the 'Keller process' but is saved from this fate when the Master enlists his help to organise a riot. The Master takes control of the Prison and captures the Doctor when he arrives, strapping him to the Keller Machine to give him a first-hand demonstration of how it works. The Doctor sees terrifying images of many of his old enemies before going into sensory withdrawal to protect himself. The Master meanwhile tells Mailer the reason why he freed the prisoners - he wants them to help him steal the Thunderbolt rocket. With this he plans to destroy the World Peace Conference, thus causing a Third World War after which the Earth will be at his mercy.

The hi-jack succeeds and, on the Master's instructions, the prisoners transport the Thunderbolt to a disused air base nearby. Yates manages to follow on a motor bike but he is captured to be used as a hostage if needed.

Mailer is sent back to the Prison to supervise in the Master's absence, and he catches the Doctor and Jo as they try to escape. To their horror, they discover that the Keller Machine has now developed the power to teleport itself from place to place.

Suspecting that the Master has hidden the Thunderbolt at the Prison, the Brigadier decides to investigate.

The Master returns to the Prison and forces the Doctor to help him restrain the Machine as it has become far too strong for him, feeding on the prisoners' evil as it rampages through the building. They manage to encircle the Machine in a force field, and it becomes inactive. The Master then leaves the Prison as the Brigadier, disguised as a delivery man, leads his troops in an assault on the building. Mailer is killed while the Master returns to the air base, where he plans to set off the Thunderbolt.

Yates has escaped from the air base and he informs UNIT of the missile's location. At the Prison the Brigadier prepares to take on the Master while the Doctor works out a way to deal with the Keller Machine, which has broken its bonds and is once more running amok in the building. The Machine appears before the Doctor and Jo in an attempt to kill them. Suddenly, however, Barnham enters the room and the Machine switches itself off as there is nothing evil in the man.

The Doctor receives a 'phone call from the Master and tries to bargain with him - the Master's dematerialisation circuit for the Thunderbolt missile. The Master agrees.

Protected by the presence of Barnham, the Doctor takes the Machine to the air base where he uses it to confront the Master. In the confusion caused by the Machine, the Doctor is able to programme the Thunderbolt to self-destruct. However, Barnham inadvertently steps in front of the Machine which allows the Master to break free of its influence and escape in a van, running Barnham down in the process. The Doctor and Jo evacuate the area as the missile explodes, destroying the threat of the Mind of Evil.

Back at the Prison, the Doctor has another 'phone call from the Master, who thanks him for the dematerialisation circuit and hopes he enjoys his exile. The Master is once more free to roam Time and Space.

(On 2 Shot 235) - 20 -

LARNHAM: Miss Grant...

THERE IN THE DOORWAY IS BARNHAM)

/As LARNHAM gets nearer to box it stops/

DOCTOR WHO: (cont) Larnham. Get back! Don't come in here!

As LARNHAM x's fwd TO HIM R. 2/I slowly losing DR. & JO to end LARNHAM & LOX

(PUZZLED, BARNHAM COMES FURTHER INTO THE ROOM AND AS HE GETS NEARER THE BOX THE THROBBING GETS LOUDER AND LOUDER)

/LOX TO STOP/

234. 1 A — Tight JO/DR.

BARNHAM: I heard that noise again/...

235. 2 G — LARNHAM & LOX

JO: (TO DOCTOR WHO) It's stopped/...

He x's away

(BARNHAM LOOKS ROUND PUZZLED, DIM MEMORIES OF THE KELLER PROCESS STIRRING IN HIS MIND)

BARNHAM: I remember this place ... something happened here ... something terrible.

/BOX STARTS UP AGAIN/

(BARNHAM STARTS TO BACK AWAY, AS HE DOES SO THE THROBBING OF THE BOX STARTS TO RISE AGAIN AS HIS INFLUENCE WANES)

DR. in from L, RUN THEM R. Keep box in frame all the time.

DOCTOR WHO: Barnam no - don't go! (cont ...)

(BUT BARNHAM CONTINUES TO BACK AWAY AND THE THROBBING OF THE BOX RISES HIGHER AND HIGHER)

- 20 -

(1 NEXT)

(On 2 Shot 235) - 21 -

/LOX DIES DOWN AGAIN AS THEY GET NEAR IT/

Tighten as they get nearer to box

DOCTOR WHO: Barnam it's all right ... it's all right...

(SLOWLY BARNHAM COMES BACK, AND AS HE DOES SO, THE THROBBING OF THE BOX DIES DOWN AGAIN)

Hold LARNHAM's sit End LOX/DR/ LARNHAM sat

/LOX STOPS/

It can't hurt you, Barnam. And while you're here it can't

236. 1 A — MS JO She x's fwd.

hurt us! That's it...Sit down./

(BARNHAM GOES RIGHT UP TO THE BOX AND THE THROBBING DIES DOWN ALMOST COMPLETELY)

237. 2 G — LOX/DR./LARNHAM sat

JO: I don't understand, Doctor ... Why?/

(DOCTOR WHO IS OVERJOYED)

Eureka!

DOCTOR WHO: /The Mind of Evil, Jo.

238. 1 A — MCS JO

DOCTOR WHO: This creature feeds on the evil impulses in the mind./

- 21 -

(2 NEXT)

(On 1 Shot 238) - 22 -

JO: And Larnham hasn't got any...

239. 2 G (quick) — MCS DR. ZOOM IN to CU

DR.WHO: Exactly./ The machine extracted them all - somehow or other the effect of his mind acts as a screen and neutralises it... as long as he's here we're safe.

/4F F/od/

240. 4 F — 17. EXT. MOUNT H.Q. DAY

2 SOLDIERS exit from R. PAN THEM L. to pass BRIG. PAN BRIGADIER R. to enter.

/4D M2 2D/

241. 3 D — 18. INT. FOYE H.Q. DAY

/4-D Int./ HQ./

BRIG.entering/ COSWORTH/YATES. They rise. As YATES sits, ZOOM IN losing him to COSWORTH/ BRIG.

(COSWORTH AND MIKE SIT AT MAP TABLE. THE BRIGADIER ENTERS. BOTH RISE.)

BRIGADIER: Good afternoon. How are you, Captain Yates?

MIKE: Recovering rapidly, sir.

BRIGADIER: Good. Well, sit down. How's it going, Major?

COSWORTH: Fine, sir. I've checked with the Ministry of Defence.

BRIGADIER: And?

COSWORTH: The Thunderbolt is equipped with an abort mechanism. Once in 'go' condition we can blow it up at any

242. 4 D — MCS BRIGADIER

time./

BRIGADIER: So if the Master threatens to launch the missile, we simply blow it up on the ground from here.

C-3 Shed 3-H Process 4-G Chamber

RECORDING BREAK - 2nd day

1-C Governor's Office 5-A "

(4 next)

- 22 -

(On 4 Shot 242) - 23 -

/2G A1 4G 3H/

243. 4 G — CU CREATURE in machine — 19. INT. PROCESS CHAMBER. DAY

244. 2 G — JO/LOX/LARNHAM/DR.

(THE CREATURE IN THE LOX IS TRYING TO ESCAPE)

245. 3 H — CU JO

JO: Can't you kill it now, Doctor?/

246. 2 G — Tight LARNHAM & box/DR.

DOCTOR: No, this creature is incredibly resilient, Jo. It would take an

247. 3 H — A/S

atomic explosion or an enormous charge of electricity to destroy it./

248. 2 G — A/S Loosen.DR. x's to LARNHAM

JO: So what can we do?/

DR.WHO: You wait here. I've got to go and see Sergeant Benton.

JO: All right.

DR.WHO: (TO LARNHAM) Larnham, old chap, listen to me. Will you stay here till I get back?

LARNHAM: ... but it frightens me..It's evil...

DR.WHO: I'll be as quick as I can.

Let DR. out R. Jo, look after him.

(DOCTOR WHO HURRIES OUT. JO AND LARNHAM ARE LEFT

249. 3 H — MS JO. PAN HER R. to tight JO/LARNHAM

WITH THE BOX./ JO SMILES ENCOURAGINGLY AT LARNHAM)

JO: You've never told me your first name?

/3 - C FAST/ /HANGAR SHED/

- 23 -

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STORY REVIEW

Paul Mount

A nameless alien parasite creature, somehow brought to Earth by the Master and housed in a portable jukebox; a couple of noisy prison riots; gun battles; a nuclear missile; helicopters; and UNIT's six-man army. These (and more) are the ingredients of Don Houghton's second 'Doctor Who' script, 'The Mind of Evil', a prime example of a four-part serial extended beyond its natural length to a six-parter.

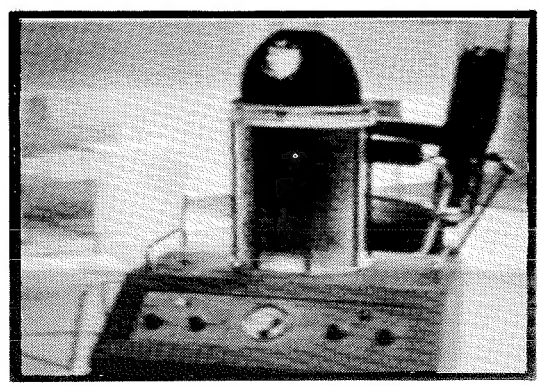
With the Doctor and the swiftly-returning Master clashing again in such a volatile and explosive story, it's difficult to pinpoint exactly where and why 'The Mind of Evil' fails, both dramatically and as good 'Doctor Who', but fail it undoubtedly does.

The script harkens back to the style of the previous season, with much of the action centred in or around 'an institution' - in this instance Stangmoor Prison, where further experiments with the Keller Machine are being carried out on extra-violent inmates. Like 'Terror of the Autons' (Serial "EEE") before it, 'The Mind of Evil' is something of a typical early 1970's 'Doctor Who'; the UNIT 'family' are out in full and at their best. The sad-faced Benton as ever falls foul of the Brigadier's formidable temper when he loses track of the suspect Captain Chin Lee. After a serial in which he gets constantly battered and bruised, Benton's child-like delight at being made 'acting-Governor' of the Prison in the absence of the Brigadier is almost touching. Mike Yates, on the other hand, grinning "like a Cheshire Cat" and leering most unconvincingly at the above-mentioned Chin Lee, is shot at, captured after an ill-advised motorbike ride and finally escapes from the clutches of the Master and his mercenaries to become the Brigadier's blue-eyed boy again. The Brigadier himself is, as ever, 'the total soldier', dedicated to working night and day to ensure the security of "the first World Peace Conference" (sic). And Nicholas Courtney has a little more to do on this occasion than shout at his troops. As usual he blunders through the serial in his typically-militaristic fashion, with his 'if it can't be shot it can be blown up' mentality coming over more to the fore. At one point, however, he infiltrates the Prison by posing as a goods van driver, complete with Cockney accent and flat cap, before dropping the cover and leading an armed attack. UNIT's troops are swelled, incidentally, by the obsequious and bespectacled Major Cosworth, an extremely annoying character who treats the Brigadier with absolutely no respect whatsoever and gives the impression that the whole operation could not succeed without his involvement! Corporal Bell (originally named Bates in early drafts of the script) is another new addition to the UNIT fold, although her involvement in the story is relatively minor.

At Stangmoor Prison itself there is a curiously antiseptic atmosphere. The prisoners may well be rioting but we only ever hear the riots off-screen, and when we do see the in-mates it is never more than about half-a-dozen of them at a time. The riots themselves are disturbingly bloodless, with the stuntmen of HAVOC falling off walls, rolling down steps and generally throwing themselves about with their usual carefree abandon. Somehow the numerous 'action set-pieces' scattered about the serial don't have quite the flair and realism of those in the like of 'The Ambassadors of Death' (Serial "CCC"), despite their frequency.

The leader of the prisoners is Mailer. Desperate, ruthless, adept at wielding a gun and with a nice line in sneers, this character, portrayed by William Marlowe, almost appears to have been added as an afterthought, an example of the very-necessary padding prevalent throughout the serial. Indeed, the first riot which he instigates is foiled by, of all people, Jo Grant! Concerned only with his own passage away from the prison and the whole country, Mailer falls in with Keller/the Master without question and shows absolutely no interest in the Time Lord's plan to wipe out the World Peace Conference with a hi-jacked missile. Mailer may be just a willing pawn of the Master but as he himself explains: "He's using me, I'm using him."

The Mind of Evil of the title is the pulsating organism lodged in the Master's machine, and its destructive capabilities are quite remarkable - if occasionally a little inconsistent. Whilst its first victim is apparently clawed to death by rats, its second, Professor Kettering, is drowned in a dry room. However, for the Doctor the machine conjurs up first fire (a nice reference back to Don Houghton's own 'Inferno' (Serial "DDD")) then later some familiar old adversaries. The Master himself is faced with being humiliated before a cackling image of the Doctor whilst an even more unfortunate American



ambassador is subjected to an attack by an utterly ludicrous Chinese dragon, the very presence of which in the story is best left forgotten. It's only later, when the machine starts to teleport itself about the prison, that its victims (convenient guards and prisoners) suffer a Dalek-like negative effect before expiring.

This alien parasite is unquestionably one of the more curious opponents that the Doctor has had to face. Brought to Earth doubtless against its own will, the creature, acting according to its nature, removes all the evil impulses from its victims. Under controlled circumstances, as with Barnham (Neil McCarthy), the subject becomes "a zombie" without trace of any violent emotions. Unchecked, however, the machine turns its victims' fear against them, manipulating and terrorising the mind of the unfortunate. "We believe what our minds tell us to," the Doctor explains to Jo in the second episode. It is never made clear, however, how this belief is translated into a physical phenomenon, such as the quantities of water found in Professor Kettering's lungs.

If nothing else, the story presents us with an unexplored moral point; obviously evil by our definition and standards, the parasite is, to all intents and purposes, acting according to its own natural instincts - in particular, its instinct to survive by draining the minds of others. Taken no doubt forcibly from whatever environment it might regard as 'home', it becomes, without choice, a mind of evil.

The Doctor/Master conflict is beginning to develop very promisingly now. The Doctor is able to recognise the Master's tactics and the Master himself almost seems to relish the Doctor's inevitable interference in his plans - although, as usual, he passes up several opportunities to despatch the Doctor once and for all as a result of his childish desire to intimidate his enemy and boast of his own cleverness. Jon Pertwee and Roger Delgado are both faultless in their performances as the bitter opponents. Delgado is at his charming best throughout, thus his acts of brutal violence (gas-bombing prison wardens, callously running over Barnham in a truck etc.) are all the more shocking. Pertwee too is in cracking form, rude and ill-mannered during Kettering's briefing on the 'Keller Machine' - "People who talk about infallibility are usually on very shaky ground," he states as one of a series of loud asides to Jo - and bitingly sarcastic just seconds after the Brigadier has saved his life by shooting Mailer at the beginning of the final episode: "Do you think for once in your life you could manage to arrive before the nick of time?" The Doctor forges a firm friendship when he converses fluently in Chinese dialect (subtitled for the viewers' benefit) with the delegate Fu Peng, airily name-dropping Mao Tse Tung (Tse Tung to his friends!). Rather more excruciating are his reminiscences to Jo about his incarceration with Sir Walter Raleigh in the Tower, but we are mercifully spared all the details of this. However, Pertwee is at his portentous best when he describes the Keller Machine, in breathless tones, as: "...the greatest threat to Mankind since the beginning of Time." Even better, just after the Machine has escaped from the makeshift trap he and the Master have together affected to cage it in, there is an unusual note of defeat in his voice: "How on Earth am I going to stop it?" The story's exertions seem to be too much even for the Doctor's remarkable constitution and he takes time out to slip into one of his comas, to re-energise himself for the coming struggle.

By the end of six meandering, but visually interesting episodes, the Master has recovered the dematerialisation circuit which the Doctor switched for his own, faulty model in the previous adventure and would appear to be free once again to occupy his time with other diversions. But a timely telephone call to the Doctor suggests differently, with the promise of the eventual destruction of the Earth!

'The Mind of Evil' isn't exactly a bad story, but perhaps just an ill-chosen one. Sterile and perfunctory, there's no real sense of horror about the dual threats posed by the Master and the silent Machine. In contrast to 'Terror of the Autons', which signalled a new direction for the series, this story seems in many ways a 'throwback' to the seventh season, with its grim, realistic setting and its tortuous length. If it had been made as a four-parter it would doubtless have worked much more satisfactorily, but as it is the whole thing seems very much a case of 'going through the motions', with the requisite amount of the spectacular balanced unevenly against a sadly lacking storyline.

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PRODUCTION OFFICE

Jeremy Bentham

"I suppose I was commissioned because 'Inferno' (Serial "DDD") had worked reasonably well," comments Don Houghton of his return to writing for 'Doctor Who', recalling somewhat modestly the Production Office's very enthusiastic response to his first contribution. With that earlier serial Houghton had not only delivered a set of first-rate, tightly-paced and tension-filled scripts but he had also delivered them on time; a factor which endeared him greatly to Barry Letts in his continuing efforts to pull 'Doctor Who' together into a smooth-running production.

Commending Houghton for having structured a seven-part story with hardly a hint of padding, Letts suggested him as the ideal writer to handle the first of the six-parters scheduled for the eighth season. The Producer's main worry was to avoid the flagging that tended to occur around the middle of lengthy storylines. In his experience writers liked to open with a bang but all too often would then save their best shots for the climax. What was wanted, he felt, was a plot with at least one surprise or one new device per episode.

'Terror of the Autons' (Serial "EEE") had been made fairly economically, thus liberating a little more of the budget with which to make this serial something of a showpiece. Letts' aim was to have an action-packed, contemporary show along the lines of 'The Ambassadors of Death' (Serial "CCC"), but without the variable pace and huge expenses of that seventh season story.

Houghton felt very comfortable writing for Jon Pertwee's incarnation of the Doctor, and not just for professional reasons either. Through a curious quirk of show-business geneology, Jon Pertwee was (and is) Don Houghton's daughter's grandfather from his previous marriage... Although arguably biased because of this, Houghton felt that Pertwee was "...the best and certainly the most imaginative of all the Doctors", further asserting that the show's new format "...was tailored to suit him and worked very well as a consequence."

It was Houghton's current wife, actress Pik-Sen Lim, who suggested several of the elements for this, his second story. In discussions with Script Editor Terrance Dicks it had been agreed that Houghton would write about a creature capable of feeding on the evil and fear present in the minds of human beings - a parasite that induced feelings of terror in its victims, to feed on the violent emotions of their horrified death throes in return. The notion of basing the story around a prison arose fairly early on, with the parasite's devolution into a machine-based creation coming quickly thereafter. The problem, Houghton felt, was how to sustain six episodes with the relatively simple plot of a prison under seige with a vampiric machine inside which the Doctor must somehow neutralise. Pik-Sen Lim put forward the idea of the machine attacking the delegates of a disarmament peace conference in London, the main victims being (predictably) the Americans and (even more predictably...) the Chinese. Houghton approved, and in a burst of inspired creativity even wrote in the central character of a young, female Chinese army Captain, for which part he could suggest an ideal actress to the Director...

But what would be the link between the prison and the peace conference?

Analysis of the storylines already assembled for the eighth season revealed there to be a place in each for a megalomaniacal villain. Robert Holmes' 'Terror of the Autons' had already established the Doctor's arch-foe as the Master. What if this character were to be carried right the way through the season? speculated Letts and Dicks. He need not always be instantly recognisable as the villain - in fact he need not even be introduced into the plot of any given story until some way through it. Thus the decision was made to incorporate the Doctor's 'Moriarty' into all of this season's stories, and the dastardly Dr Emile Keller was rapidly transformed into the Master. As a point of note, the adoption of the Master as central villain came mid-way through the scripting of Houghton's story, hence the absence of the later convention of the Time Lord's alias being a foreign language equivalent of the word 'master'. The Master's character was also allowed to be more ostentatiously decadent in the early episodes than would normally be the case, especially during the London film sequences, which were the first to be shot for this story.

The required link between the prison and the peace conference was thus easily established as part of the Master's latest evil scheme.

Like 'Terror of the Autons', which was originally titled 'The Spray of Death', this story underwent a change of name from 'The Pandora Machine' to 'The Pandora Box' before the more 'Doctor Who'-sounding 'The Mind of Evil' was eventually settled upon. Barry Letts chose BBC staff Director Tim Combe to handle its realisation because he wanted someone who was known to be good with film. Combe had done well on 'Doctor Who and the Silurians', Letts being particularly impressed with the way he had handled action-based, large crowd scenes, of which there would be many in 'The Mind of Evil'.

As Producer, Letts was also the principal point-of-liaison in the negotiations to enlist the help of the R.A.F. for the missile sequences (see page "56-11"). In the end this did not prove too difficult, especially when the Production Office let slip that considerable help had been forthcoming from the Army for 'The Invasion' (Serial "VV").

The intention was to make a spectacular-looking show that worked to its budget. The former was achieved, but ultimately at the cost of the latter. The bills for the stunt scenes in and around the prison proved horrendous, especially as they took so long to set up, practise, rehearse, re-rehearse and film - in an industry where time, particularly stunt men's time, is money. Cuts were made wherever possible (for example the UNIT mobile H.Q. was done as a studio set rather than as a vehicle on location) but ultimately there was no disguising the enormity of the costs. However, looking back on it philosophically, Don Houghton is the first to state that "...there is positively no truth in the rumour that the show was expensive because my wife, Pik-Sen Lim, played a prominent role in the story"!

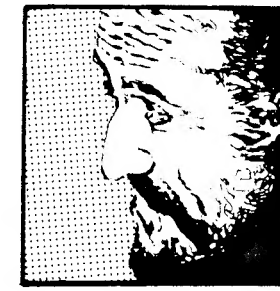
As to its impact on screen, Terrance Dicks expresses some scepticism that the basic meat of the storyline justified the exotic sauce of its action scenes. "When you look at it now, you have to admit parts of it do tend to look a little laboured" he says, commenting on the capture-escape-run around-learn one salient fact-get recaptured routines which padded out some episodes in a manner ominously reminiscent of parts of 'The War Games' (Serial "ZZ").

Even Don Houghton has some reservations with the benefit of hindsight, expressing the common gripe of script-writers whose work gets entrusted to others to be realised:

"Writers are rarely a hundred per cent happy about any 'visual realisation' of their work. It must be remembered that whilst the script was still being sweated over in the typewriter, the writer was already producing it, directing it, designing it, casting it, lighting it, scoring it - and everything else, long before anyone else had even set eyes on it. Scripting is always a compromise, at best, between the writer and the production staff. It hardly ever comes out as you visualised it in your mind's eye."

"I AM THE MASTER!"

Stephen James Walker



With hindsight, the creation of a character like the Master was probably inevitable, given the new format adopted by 'Doctor Who' in the early 1970s. When discussing the thinking behind the character, Barry Letts explains that Sherlock Holmes' great adversary, Moriarty, was his chief inspiration (see page "55-08"). However, the concept of the 'arch-enemy' goes back very much further than Sir Arthur Conan-Doyle's novels, and was firmly established in many of the genres and individual sources on which 'Doctor Who' drew in the seventh and eighth seasons (see 'Season 7 Special' release).

Take, for example, the spy/thriller genre, as typified by the popular 'James Bond' films. Bond would invariably find himself pitted against some deranged yet brilliant super-criminal, intent on taking over or destroying the world by means of a dastardly - if highly convoluted and improbable - 'master plan'. The name and individual eccentricities of the villain might have changed from film to film - Dr. No, Goldfinger and so on - but the character fulfilled essentially the same function every time - i.e. to act as Bond's 'arch-enemy'.

Superheroes, too, need supervillains to pit themselves against. And as each superhero has characteristic 'powers' and special abilities, so too must his adversaries. Batman, for example, is aided by Robin, has the use of his utility belt and the Batmobile and can call on the resources of the Batcave, while each of his regular foes - the Riddler, the Joker, the Penguin, etc. - has his own particular special abilities and 'trademarks'.

In 'Doctor Who', the Doctor is aided by Liz or Jo, has the use of his electronic gadgets and 'Bessie' and can call on the resources of UNIT. He also has his own special powers and abilities: the power to enter a self-induced coma; mastery of the art of Venusian Aikido; the ability to converse fluently in obscure dialects; a high resistance to G-forces; and even, in 'The Ambassadors of Death' (Serial "CCC"), the power to make an object disappear as if by magic and reappear minutes later by shifting it in time, without any apparent technological aid! The Master, filling the previously-vacant role of the arch-enemy/supervillain, has already established a number of his own 'trademarks' by the end of 'The Mind of Evil': an exceptional degree of strength; the power to hypnotise people and force them to do things against their will; the use of a matter-condensing gun; and a vicious line in karate chops.

The Master's name is itself evocative of similar character-types in other genres, such as Batman's aforementioned adversaries and Adam Adamant's recurring foe, the Face.

But what of the Master's antecedents in 'Doctor Who'? The only other humanoid villain to have appeared in more than one story prior to the introduction of the Master was the Time Meddler - another member of the Doctor's own race, now named as the Time Lords. The Time Meddler was a very different type of character to the Master, however. While the former was motivated by a mischievous sense of fun and a genuine desire to 'improve' the course of history, the intentions of the latter can only be described as purely evil. A much nearer comparison in terms of character traits is to be found in 'The War Games' (Serial "ZZZ"). In fact, this epic-length adventure, which was co-written by Script Editor Terrance Dicks, features a number of characters who may well have provided at least some of the inspiration for elements of the Master's persona.

The most obvious of these is the War Chief, an evil renegade Time Lord who is simply exploiting his Alien 'allies' as part of a callous scheme to gain power for himself. The encounters between the Doctor and the War Chief are disturbing, and quite unlike anything seen previously in the series. They discuss the pros and cons of the situation in an academic, almost detached manner, and for once the Doctor seems to regard his adversary as an intellectual equal. When the War Chief attempts to strike a bargain, offering the Doctor a half-share of power in return for his help, the viewer is left with serious doubts about what the Doctor's decision will be. This curious rapport between the Doctor and the War Chief - perhaps some indefinable bond between two members of the same race, outcasts amongst lesser beings - is something that is also very apparent with the Master. The Doctor actually seems to relish each new encounter with his 'arch-enemy', at one point admitting that he is "almost looking forward to it".

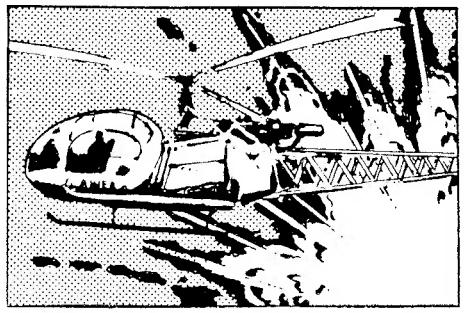
However, while the War Chief might have been influential as far as character traits are concerned, the War Lord provides a much closer parallel in terms of appearance, with his saturnine countenance and plain black suit, complete with Nehru-style high-collared jacket. And as leader of the Aliens, he also sports a pair of the small, round, pebble-glass spectacles they all wear. Some of the most memorable scenes in the story are those in which Aliens such as Smythe and van Weich remove their spectacles to hypnotise more, hapless human 'guinea pigs' - staring into their eyes in a manner strikingly similar to the Master's technique of 'recruiting' people to his cause.

Of course, the Master who made his debut in the eighth season was not the first villain of that name to have been featured in 'Doctor Who'; the mysterious controller of the 'Land of Fiction' in 'The Mind Robber' (Serial "UU") was also referred to as "the Master". There is no evidence to suggest that any link was intended between these two similarly-named characters - in fact, the plot of 'The Mind Robber' would seem to rule out any such link - but for those who enjoy working out their own, after-the-fact interpretations of stories, the intriguing possibility presents itself (bearing in mind the then Script Editor Derrick Sherwin's concept of 'The Mind Robber' as a nightmare or hallucination) that the Clockwork Soldiers and White Robots were Jamie's and Zoe's nightmarish impressions of Quarks and Cybermen, while "the Master" was indeed the Doctor's vision of his Time Lord adversary! If nothing else, it seems likely that Terrance Dicks and Barry Letts may have recalled the name of the character from 'The Mind Robber' and felt that it had just the right 'ring' to it to suit their new, regular villain.

Quite apart from fulfilling the function of 'arch-enemy', the Master also provided the series' production team with a means of lending credibility to a situation which would otherwise have become increasingly unbelievable and ridiculous - a rapid succession of seemingly unconnected alien invasion threats and attacks on Earth.

This potential problem had been sidestepped in the seventh season, which had featured only one genuine invasion attempt - that of the Nestenes and Autons. In the eighth, however, all of the various threats with which the Earth was faced were seen to be due purely to the Master's intervention - and the Master's interest in Earth was arguably due entirely to the Doctor's presence. The workability of the exile scenario was thus preserved, although it was becoming evident even at this stage that viewers would soon start to tire of the long list of alien beings seemingly forming a queue to attack the planet.

In terms of casting, it would be hard to imagine a better choice than Roger Delgado to play the part of the Master. His sinister appearance - only slightly augmented by make-up - was perfect for the role, and even though the series itself was becoming increasingly 'camp', he admirably resisted any temptation to interpret the character as a moustache-twirling pantomime villain. Rather, his icy charm led viewers to anticipate each new encounter with him even more eagerly than the Doctor did himself...



THE CSO EFFECT

Tim Robins

The advent of colour television technology heralded the arrival of a new type of video special effect - Chromakey, otherwise known as Colour Separation Overlay or CSO.

Until the first use of CSO in 'Doctor Who' (in 'Doctor Who and the Silurians' (Serial "BBB")), the series had employed two types of optical - i.e. electronically created - effects, Inlay and Overlay. These were electronic equivalents of the Matte effects used in film, and basically analogues to back- and front-projection.

The technique of Inlay has already been detailed (see page "45-08"). However, to re-cap, electronic Inlay combines the output from two cameras via a Portable Inlay Desk to create a single picture. The Portable Inlay Desk is equipped with a rostrum camera that focusses on a white screen onto which black 'masks' can be placed. The Desk differentiates between the areas of white screen and black mask, switching the output of one camera onto the white and that of the other onto the black.

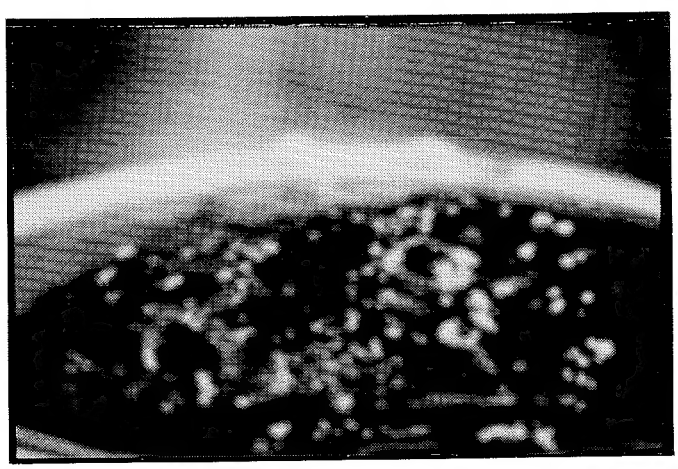
Overlay works according to a similar principle, differentiating between areas of white and black to superimpose one image onto another. One camera shoots a foreground set consisting of a well-lit performer dressed in light-coloured clothes and standing against a black backdrop. A second camera shoots a mounted photograph. Where the first camera sees black it switches in the second camera's output. The net result is that the performer is superimposed onto the photographic background.

Overlay can be used with both black and white and colour recording, and was indeed used in, for example, 'Doctor Who and the Silurians' to show the Doctor and Jo against a background of caves.

Inlay and Overlay are not without their problems. With Inlay, a performer might move into an area that has been 'masked'; when the camera outputs are combined, the performer - or those parts of the performer's body that passed onto the masked areas - would then seem to vanish. In 'Doctor Who' this 'mistake' was sometimes used as a cheap special effect. With Overlay, on the other hand, dark items of clothing or shadows on the performer might be 'read' as black. Thus, for example, if the performer wore a black tie and the background photograph was of a forest, the screened picture might show a pine tree around the performer's neck!

Colour Separation Overlay, it is claimed, avoids the problems of Inlay and Overlay. But in its own way it inherited the drawbacks of both.

With CSO the electronic switching of images responds not to the contrast between black and white but to the presence of a selected hue of colour. One camera looks at a foreground set which consists of, say, a performer standing against a coloured backdrop. The colour of the backdrop is the keying colour, the colour the electronic switch will respond to. A second camera looks at the image which will provide the background to the final picture. This image can be a drawing or painting, a photograph or even a moving picture on telecine or video. The outputs of the two cameras are then combined by a chroma-keyer. The chroma-keyer selects the hue of the keying colour, i.e. the colour of the backdrop, and where the first camera sees this colour it switches in the second camera's output.



The keying colours most frequently used are blue, yellow and green. Yellow tended to be used in the early 1970s but blue has since become more common because it is hardly present in the colour of human skin and is rarely used in the foreground. One reason why yellow is used as the keying colour more frequently in 'Doctor Who' than in most other programmes is that many CSO shots involve the use of the blue Police Box prop.

Like Overlay, if the backdrop colour appears on the performer (e.g. if he wears a tie of that colour) the background photograph will be switched in.

'The Mind of Evil' features a CSO scene showing Yates, Benton and a foreground object with the Thunderbolt missile in the background. This would have been achieved as follows: Camera A shot Benton, Yates and the object against a yellow backdrop. Camera B shot a photograph of the missile. The chroma-keyer, set to select yellow as the keying colour, switched the output of Camera B into every area where there was yellow in the output of Camera A. The result: Benton, Yates and the object are seen standing in front of the missile (see illustrations).

A number of precautions need to be taken with CSO in addition to ensuring that nothing in the foreground is the same colour as the backdrop. If the shot is to look realistic, the lighting of the foreground must match the lighting of the background image. This image itself should have some depth to it and be slightly out of focus, as that is how the background of a television picture normally looks. Props placed in the foreground set to match objects in the background image - for example, a series of bollards along a road - also help to add realism and

LEFT: The mind parasite within the Keller Machine

depth.

Arguably the most important aspect of matching foreground with background is perspective. For instance, in the example used above Benton and Yates had to look the right size in relation to the missile. Different sizes are achieved by shooting the actors from different distances (either by moving the camera physically or by altering its zoom lens setting). Thus if the Director had wanted to make Yates and Benton much smaller in relation to the missile he could have done so by using a long-shot of the foreground set.

This technique presents a problem for CSO - a long-shot reveals more of the coloured backdrop. To make an actor look very small in relation to the background image a backdrop might be needed that filled the entire studio! Fortunately, it is not necessary to go to these lengths. For long-shots the area of the studio that needs to be given a coloured background may be reduced by the use of a 'vignette'.

A vignette is a frame of the same colour as the backdrop which is positioned in front of the camera. The result is similar to a camera looking through a key-hole. Through the hole (which may be of any shape) the camera sees the performers in front of the backdrop. Everywhere beyond the area of the hole (lighting areas, other sets, studio floors etc.) is effectively masked by the vignette, achieving the same result as a huge, studio-sized backdrop.

However, the vignette reintroduces the problem Inlay suffered from. If the actors stray away from the area in which the camera can see them, they will disappear out of shot behind the frame.

It should be noted that the backdrop need not necessarily be a coloured curtain; the colour can also come from paint or light. If a coloured (blue, yellow or green) light is used, care must be taken not to let any of it fall on the foreground objects, or the background image will start to 'break through' - typically resulting in a fuzzy effect around the edges of the object. Jon Pertwee's silver hair often caused problems in CSO scenes, reflecting the keyed colour from the background.

One of the greatest disadvantages of CSO is that, once superimposed on a background image, performers and other foreground objects usually lack shadows. The result is that CSO work rarely looks three-dimensional or convincing. While it has been the saviour of many producers of television science fiction, who require special effects cheaply and quickly, it has equally been the bane of viewers, particularly science fiction enthusiasts, who long for television to match the slicker, more convincing effects work of the cinema. This, however, remains beyond the time limits of television production - and the budget.

ILLUSTRATIONS

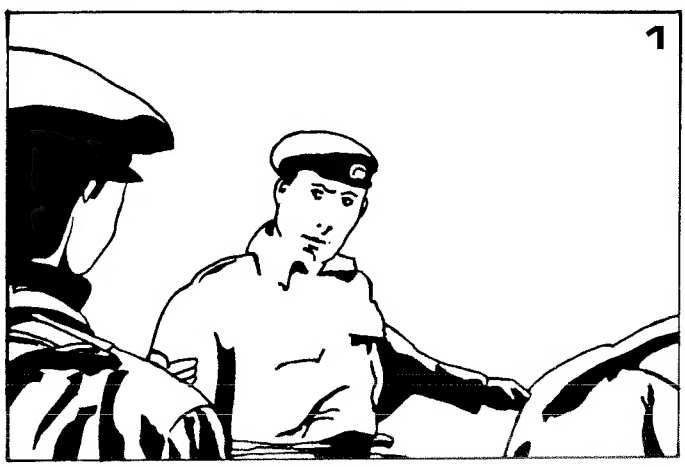
1: Camera 1 - the foreground shot. Benton and UNIT troops stand infront of a yellow backdrop.

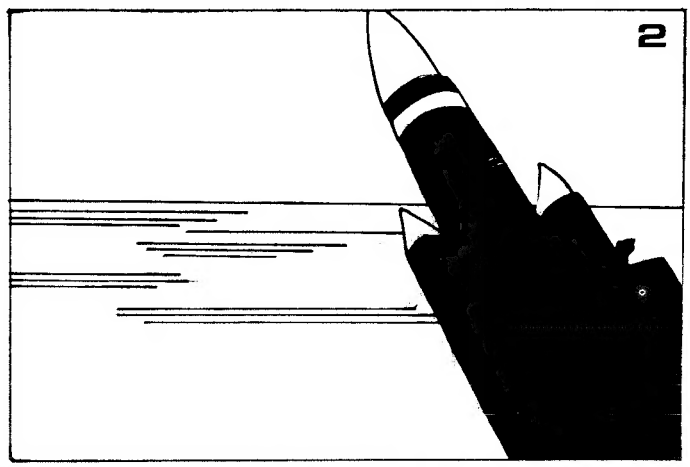
2: Camera 2 - the background still.

3: The chroma-keyer superimposes foreground, minus all yellow, onto background.

4: The picture as transmitted.

(Artwork: Tim Robins).





TECHNICAL NOTES

Jeremy Bentham

Don Houghton's storyline for 'The Mind of Evil' called for a wide variety of location settings to be sought and filmed, almost all of them before the first episode went into the studio. On the one hand was required a prison with facilities sufficient to permit extensive outdoor stunt filming. At the other extreme, the early episodes needed exteriors suggestive of the diplomatic quarter in London. In the event no existing prison was judged suitable (or, if truth be known, available by Home Office consent). Cunningly, however, P.A. John Griffiths found everything the crew needed for these sequences in and around the grounds of Dover Castle on the South coast. Not only could all the prison exteriors be shot there, but the location was also near enough to a Ministry of Defence air field for the hangar scenes to be done in the same week.

For the 'Thunderbolt' rocket the M.O.D. granted the 'Doctor Who' team access to a ground-to-air guided missile - on the condition that only R.A.F. personnel would handle operation of its launcher and transportation trolley. Hence Terrance Dicks had to insert a line into the narrative explaining that the Master had supplied uniforms to his group of hired mercenaries as a disguise. The missile was not available for the hi-jack scenes, though, so shots were deliberately kept short and tight to avoid the audience noticing that the tarpaulin-covered load in the convoy was far smaller than the full-sized rocket.

Nearly a dozen of HAVOC's team of stunt-men participated in the action scenes for this story, the most demanding of which was the assault on Stangmoor Prison. This two-day shoot involved several high falls from parapets, gunfire exchanges between troops and prisoners and, most demanding of all, the scaling of a vertical castle wall using ropes and grappling hooks. During these battle sequences Director Tim Combe made a cameo appearance as a convict, sporting his black, plastic-rimmed glasses and brandishing a carbine rifle.

Once edited, the attack footage was visually very impressive. It formed the final quarter of episode five with most of the 'highlights' being reprised at the opening of episode six. It was, however, largely responsible for the production going very dramatically over-budget - making 'The Mind of Evil' the most expensive 'Doctor Who' story to that date. Consequently, according to BBC policy (see page "53-08"), Tim Combe could never again work on the programme (the same pitfall encountered by, for example, Tristan de Vere Cole with 'The Wheel in Space' (Serial "SS")).

For security reasons the BBC was refused permission to film in or around any of the embassy buildings in Belgravia. Fortunately, reasonable substitutes were found a mile or so up the road in Earl's Court. A few phoney name plates were attached to the walls to complete the illusion.

Recording for this story began on Friday November 20th. in Studio TC3 using three pedestal cameras and, affixed to the top of a specially constructed tower, one Heron camera (with special mounting brackets). The tower made possible a series of high shots which, with the use of a wide-angle lens, increased the apparent size of certain sets, most notably the Processing Room where the Keller Machine spent much of its time.

The Keller Machine prop was devised by Effects Designer John Wood. The lights and dials were actuated by remote control on cue, as was the inflatable bladder which rose further up the column of the machine the more evil the parasite ingested. Only in the last episode was the 'lid' removed to show the latex appliance inside which suggested the parasite in its natural form.

The Inlay Operator controlled the electronically-produced 'wobble' effect used whenever the Keller Machine's power was overwhelming a victim. The Vision Mixer inserted the necessary stock footage of water, fire etc., as well as the specially-shot sequences for the Master's and the Doctor's nightmares.

For one of the Doctor's nightmares the three pedestal cameras were lined up facing caption slide easels on which were mounted standard BBC photographs of some of the Doctor's old enemies. These comprised a Dalek (from 'The Dalek Invasion of Earth' (Serial "J")), a Cyberman (from 'The Invasion' (Serial "VV")), a Sensorite, Koquillion, a War Machine, a Zarbi, Slaar and a Silurian. As vision switched to each camera in turn, the camera panned down over the monster photograph, sometimes zooming in, sometimes pulling back. As vision switched away from any given camera the photograph in front of it was then replaced with another and the cameraman waited for his turn to come round again. The combined sequence was thus a series of sweeps, sometimes solo shots, sometimes shots of two or three monsters faded and mixed together.

Don Houghton's wife, Pik-Sen Lim, coached Jon Pertwee in the phonetic pronunciation of the Hokkien dialogue he was required to learn for his discourses with the Chinese ambassador. As Pertwee understandably had difficulty with the language, some of the dialogue was eventually cut out during rehearsals. Even so, sufficient remained for Tim Combe to sanction the use of English subtitles on screen in episode two. Not counting the caption slides seen in part seven of 'The Daleks' Master Plan' (Serial "V"), this marked the first use of subtitles in 'Doctor Who'.

At the time of this serial actor William Marlowe (Mailer) was married to actress Fernanda Marlowe (Corporal Bell).

Despite the policy of shooting two episodes a fortnight, all the Chinese and American hotel suite scenes in episode three were taped during the episode one/two recording block to save set space in the later sessions. These scenes featured Barry Letts' admitted all-time 'pet hate' monster, the nightmare dragon conjured up by Chin Lee. Designed by the Costume Department rather than Visual Effects, this cuddly creation was so cute as to warrant the universal nick-name of 'Puff the Magic Dragon' during rehearsals. Its camera time was thus kept to a minimum.

The studio fight scenes shot during the episode three/four recording block did not go well. The prison riot, led by the Master and featuring a host of electrically-detonated flash charges, went so badly (with effects being mis-timed and too much smoke being generated) that it had to be rescheduled for the episode five/six block. Then the fight between the Doctor and the Master in the Governor's office almost descended into farce when a spilled vase of water made the floor as slippery as a skating rink. However, Letts chose to keep this scene in.

The effect of the Keller Machine 'zapping' its victims was achieved partly by over-exposing the camera picture - to create partial negative imaging - and partly by 'over-keying' the colour red to create a fuzzy distortion.

Dudley Simpson's incidental music included a reprise of the UNIT theme originally used in 'The Ambassadors of Death' (Serial "CCC") arranged on this occasion for synthesisers rather than conventional instruments.

PRODUCTION CREDITS

Stephen James Walker

SERIAL "FFF" — COLOUR

PART 1	Duration 24' 39"	30th. January 1971
PART 2	Duration 24' 32"	6th. February 1971
PART 3	Duration 24' 32"	13th. February 1971
PART 4	Duration 24' 40"	20th. February 1971
PART 5	Duration 23' 34"	27th. February 1971
PART 6	Duration 24' 38"	6th. March 1971

CAST

STARRING:

Doctor Who.....Jon Pertwee
Jo Grant.....Katy Manning
Brigadier Lethbridge-Stewart.....Nicholas Courtney
The Master.....Roger Delgado

FEATURING:

George Barnham.....Neil McCarthy
Captain Chin Lee.....Pik-Sen Lim
Captain Mike Yates.....Richard Franklin
Sergeant Benton.....John Levene
Henry Mailer.....William Marlowe

WITH:

Prison Officers.....Leslie Weekes, Bill Matthews
Barry Wade, Dave Carter, Martin Gordon
Tony Jenkins, Les Conrad, Les Clark
Gordon Stoppard, Richard Atherton
Prison Governor Major Victor Camford
Raymond Westwell
Chief Prison Officer Powers.....Roy Purcell
Senior Prison Officer Green.....Eric Mason
Dr Roland Summers.....Michael Sheard
Professor Charles Kettering.....Simon Lack
Arthur Linwood.....Clive Scott
Corporal Bell.....Fernanda Marlowe
Prisoners/Audience..Desmond Verini, Dennis Balcombe
Phillip Webb, George Ballentine, Francis Batsoni
Leonard Kingston, Ned Hood, Cy Town
Alistair McFarlane, Paul Blomley
Police Superintendant.....Paul Blomley
Cheng Teik (deceased).....Francis Batsoni
Female Student.....Maureen Race
Medical Officers.....Charles Pickess
Charles Finch, Cy Town
UNIT Soldiers/Staff...Charles Marriott, Stuart Fell
Nick Hobbs, Dennis Balcombe, Roger Marsden
Photographers.....Charles Marriott, Stuart Fell
American Aide.....Nick Hobbs
UNIT Corporal.....Billy Horrigan
Police Constable.....Peter Roy
UNIT Chauffeur.....Michael Ely
African Delegate.....Francis Williams
Voices on Film.....Laurence Harrington
Fu Peng.....Khristopher Kum
Vosper.....Haydn Jones
Senator Alcott.....Tommy Duggan
Prisoners.....Desmond Verini, Dennis Balcombe
Phillip Webb, George Ballentine, Francis Batsoni
Leonard Kingston, Ned Hood, Cy Town
Alistair McFarlane, Paul Blomley, Matthew Walters
Roger Marsden, Wolfgang van Jergen
Richard Atherton, Marc Boyle, Alan Chuntz
Mike Stevens, Billy Horrigan, Valentino Musetti
Michael Carter, Les Conrad, Les Clark
Chinese Aide.....Paul Tann
Passer-by.....Jim Delaney
Master's Chauffeur.....Francis Williams
Commissionaire.....Charles Saynor
Chinese Chauffeur.....Basil Tang
Fight Arranger.....Derek Martin
Police Inspector.....Richard Atherton
Charlie.....David Calderisi
Major Cosworth.....Patrick Godfrey
Fuller.....Johnny Barrs
Extras.....Les Conrad, Marc Boyle, Terry Walsh
Derek Martin, Francis Williams, Derek Chafer
Ricky Lancing, Johnny Clump, Pat Donahue
Billy Horrigan, Max Diamond, Les Clark
Bob Blaine, Michael Carter, Ian Elliott
Derek Martin, Terry Walsh, Marc Boyle
Roy Scammell, Mike Stevens, Tony Jenkins
Robert Bald, Dennis Balcombe, Charles Marriott
Gary Gregory, Laurie Ayres, P.G. Heath
Frank Bennett, Sergeant Herridage
Bombadier A. Graham, Gunner K. Davenport
Lance Bombadier R. Berkely, Bombadier R. Thompson
Bombadier J. Lamb, Sergeant D. Talbot
Bombadier Barry Hall, Timothy Combe

TECHNICAL CREDITS

Production Assistant.....John Griffiths
Assistant Floor Manager.....Sue Hedden
Assistant.....Joan Elliott
Technical Manager 1.....Eric Monk
Technical Manager 2.....Graham Southcote
Sound Supervisor.....Chic Anthony
Grams Operator.....Gerry Burrows
Crew.....No. 12
Vision Mixers.....Mike Catherwood, Shirley Coward
Floor Assistant.....John O'Shaunessy
Film Cameramen.....Fred Hamilton, Max Samett
Film Editor.....Howard Billingham
Visual Effects.....Jim Ward
Costumes.....Bobi Bartlett
Make-up.....Jan Harrison
Action.....HAVOC
Incidental Music.....Dudley Simpson
Special Sound.....Brian Hodgson
Script Editor.....Terrance Dicks
Designer.....Ray London
Producer.....Barry Letts

DIRECTOR:

TIMOTHY COMBE

BBC tv 1971